

SCREENING TOOLS TO IDENTIFY CHILDREN

THE NEXT LEVEL OF CASE FINDING

2 NOVEMBER 2017

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RIGHT TO CARE PAEDIATRIC PROGRAMME

PAEDIATRIC AND ADOLESCENT SCALE-UP PROJECT

Why Case Finding in Healthcare Facilities should be a priority

- Treatment coverage for children living with HIV remains unacceptably low, with only three in ten **eligible** children receiving antiretroviral therapy by 2012¹
- Paediatric HIV prevalence is highest in
 - inpatient settings,
 - nutrition centres,
 - **expanded programme on immunisation centres and**
 - **paediatric outpatient settings**²
- Although HIV testing in children at health facilities is recommended by WHO, it is not well implemented.²

1. UNAIDS Report on the Global AIDS Epidemic, 2013

2. Cohn J, Whitehouse K, Tuttle J, Lueck K, Tran T. Paediatric HIV testing beyond the context of prevention of mother-to-child transmission: a systematic review and meta-analysis. The Lancet HIV. 2016;3(10):e473-e481.

Use of screening tools in other countries

Zimbabwe (Paediatric HIV prevalence 4.8%)

- A simple clinical algorithm proposed – 4 questions
- Older children (6 – 16yrs)
- Primary Health Facilities
- 1 or more “Yes” correctly **identified 80%** of children with HIV infection¹


Malawi (Paediatric HIV prevalence 2%)


- Implemented a 6 question screening tool
- Children (1 -15 years)
- Hospital Wards
- If a child screens **negative** (score=0) then there is a good chance they **aren't HIV-infected**²

South Africa - Paediatric HIV prevalence 2.7% (5-14y)³

- This screening tool brings together the **existing guidelines** in a concise list of questions and formalises the screening process
- To focus **limited resources** at **targeted testing in children** who are most at risk (<15 years)
- Does not include factors involved in horizontal transmission e.g. sexually transmitted infections
- It aims to have a **high sensitivity** but not specificity
- The goal is to ensure that no HIV-infected child leaves the facility untested

1. Ferrand RA et al, 2011, TMIH
2. Schooley A, 2016
3. South African National HIV Survey, 2012


GAUTENG PROVINCE
 REPUBLIC OF SOUTH AFRICA


Joburg
 a world-class African city

Screening tool to identify children and families at risk of living with HIV

Date Clinic File no

Child's Name & Surname Gender F ☐ M ☐ DOB Age Y M

Parent's Name & Surname Phone Number Relation

Parent/primary caregiver Name & Surname

A) File Review When the child presents to the Health Care Facility review the file for the following:
 (As necessary, explain that health screening will be done for all children.)

Is the child's HIV status known? Negative/Unknown ☐ Positive ☐ On ART ☐
 To Initiate ART if not on ART ☐

SCREENING QUESTIONS

If there is a single "yes" the child needs HIV testing
 (When the need for testing is identified it is not necessary to continue with the screening process)

1. Is the parent(s) or sibling(s) of the child HIV positive?*
2. Has parent(s) or sibling(s) of the child died?
3. Has the child been abandoned?
4. Has the child been diagnosed with TB?
5. Has the child had poor health in the last 3 months?
6. Has the child been admitted to hospital?
7. Is there low weight/poor weight gain?
8. Is the child stunted or short for age?
9. Has the child ever had an ear discharge?
10. Does the child have recurring skin problems?

N	Y
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

Refer for testing

*Refer parent for testing if status unknown/negative

If this information could not be obtained from the file continue to the interview section:

B) Interview

Healthcare provider to conduct interview in a sensitive and confidential manner.

(It may be prudent for the child not to be present for these screening questions)

Obtain consent if screening is not done as part of a consultation by a clinician.

Consent: Proceed if with parent/primary caregiver

I will be asking you some questions about your and your child's health. These include questions about HIV, TB and other health related questions.
 You do not need to answer them if you do not feel comfortable to do so.

Please sign below: I agree that the healthcare provider can ask me questions.

(Parent/primary caregiver)

RECOMMENDATION


HIV testing recommended? ☐ Y ☐ N


Screened by Designation

Screening questions based on:

1. The National Department of Health South Africa. National Consolidated Guidelines for the Prevention of Mother-To-Child transmission of HIV (PMTCT) and the management of HIV in children, adolescents and adults. 2015.
2. The National Department of Health South Africa, WHO, UNICEF. Integrated Management of Childhood Illness. Vol. 2. 2014.
3. Bandason T, McHugh G, Danya E, Mungofa S, Muryaki SM, Weiss HA, et al. Validation of a screening tool to identify older children living with HIV in primary care facilities in high HIV prevalence settings. AIDS (Intemat). 2016;30(5):779-85.
4. Arpaiz S. Growth Failure in Children With HIV Infection [Intemat]. Vol. 25, Journal of acquired Immune Deficiency Syndrome. 2000. p. 37-42. Available from: http://journals.lww.com/jaids/Abstract/2000/10001/Growth_Failure_in_Children_With_HIV_Infection.aspx

PLEASE TURN OVER FOR TB SCREENING


USAID
 more than just money



- Designed by the Right to Care Paediatric Programme
- Rolled out by the Johannesburg Health District management in April 2017
- Focus on children of 5 – 14 years old (beyond IMCI)
- Only administered by healthcare providers qualified to provide HTS to children
- Sensitive nature around of questions
- Completed form to remain in child's file
- TB screening on the back



Screening Tool for identifying children and families at risk of living with HIV

SCREENING QUESTIONS

If there is a single "yes" the child needs HIV testing

(When the need for testing is identified it is not necessary to continue with the screening process)

NDOH
Guidelines

IMCI

Validated
screening
tool

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****Refer parent for testing if status unknown/negative***

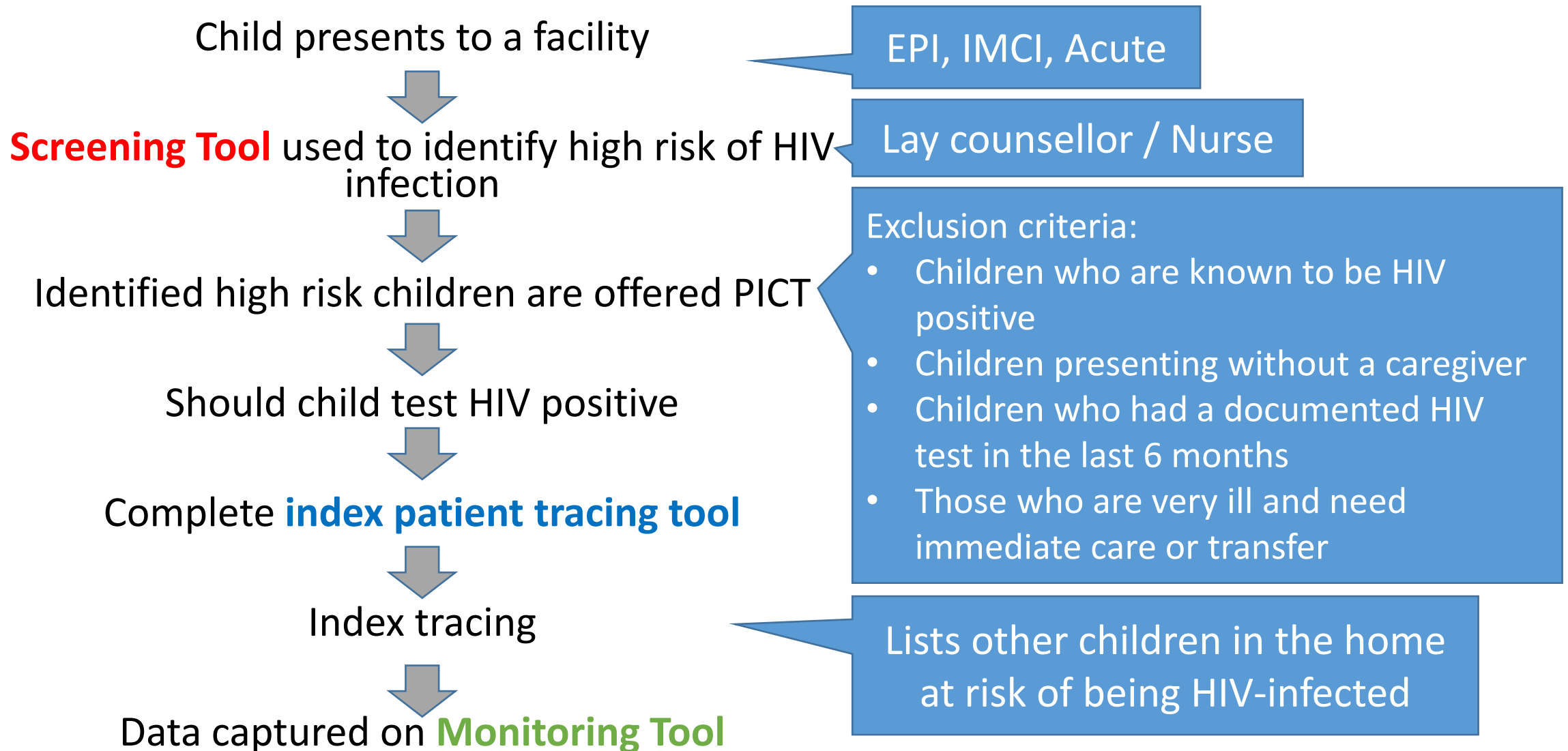
N	Y
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4. Arpadi S. Growth Failure in Children With HIV Infection [Internet]. Vol. 25, Journal of acquired Immune Deficiency Syndrome. 2000. p. 37–42. Available from: http://journals.lww.com/jaids/Abstract/2000/10001/Growth_Failure_in_Children_With_HIV_Infection.6.aspx

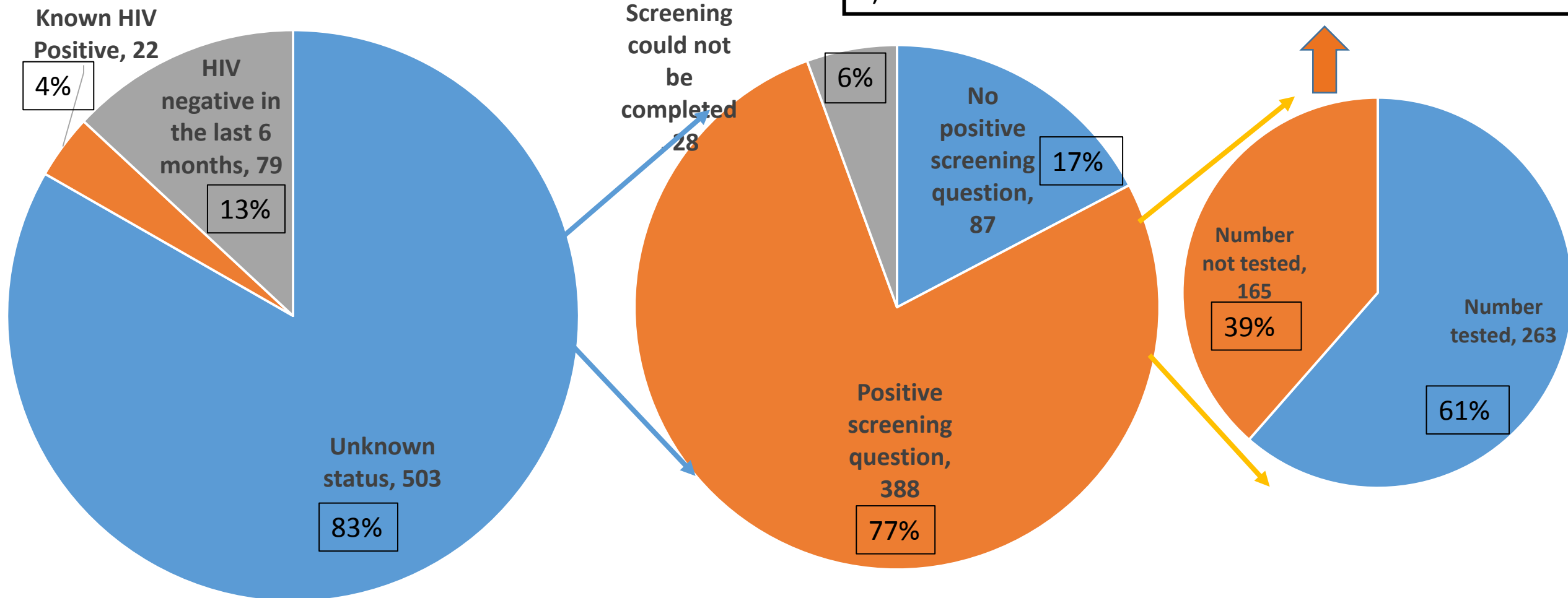
Procedure for Screening Package



Results: 1 April – 28 September 2017

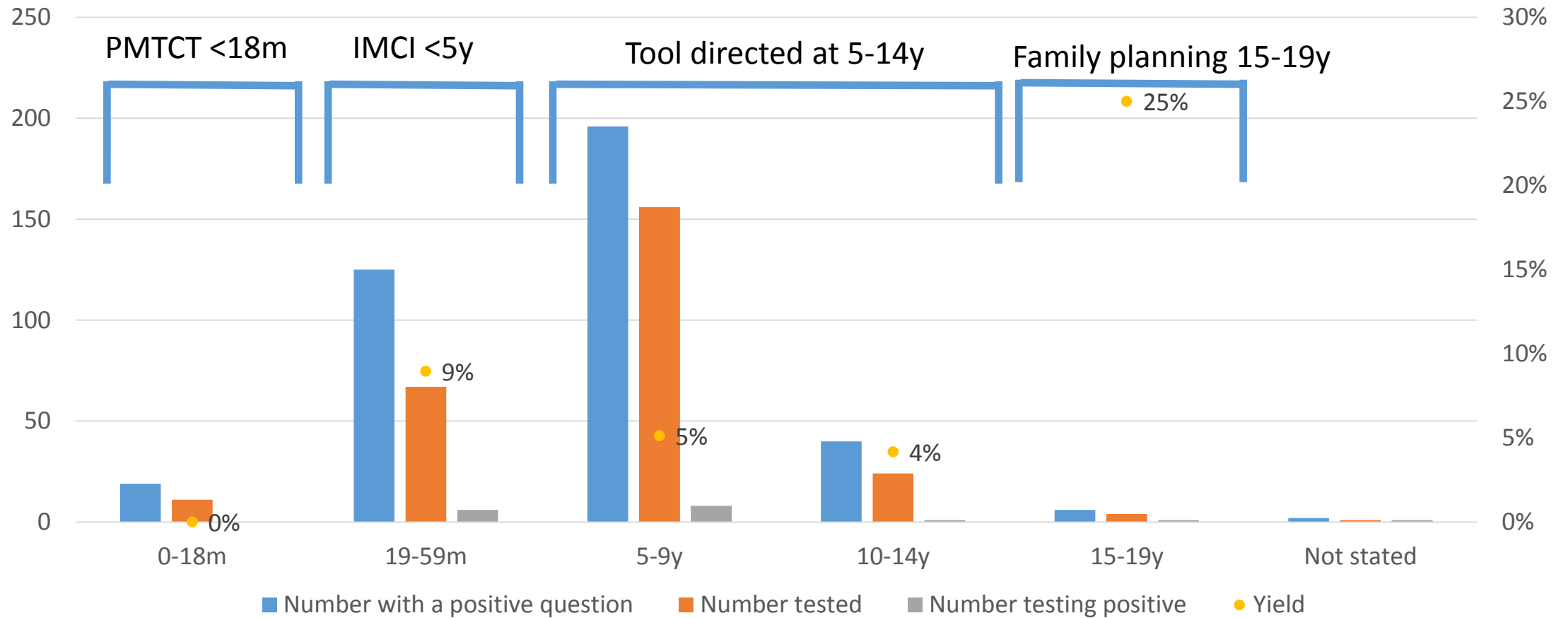
Reasons for not testing:

- 1) Caregiver does not want to know the child's status – 35
- 2) Primary caregiver not present - 21
- 3) Other - 69



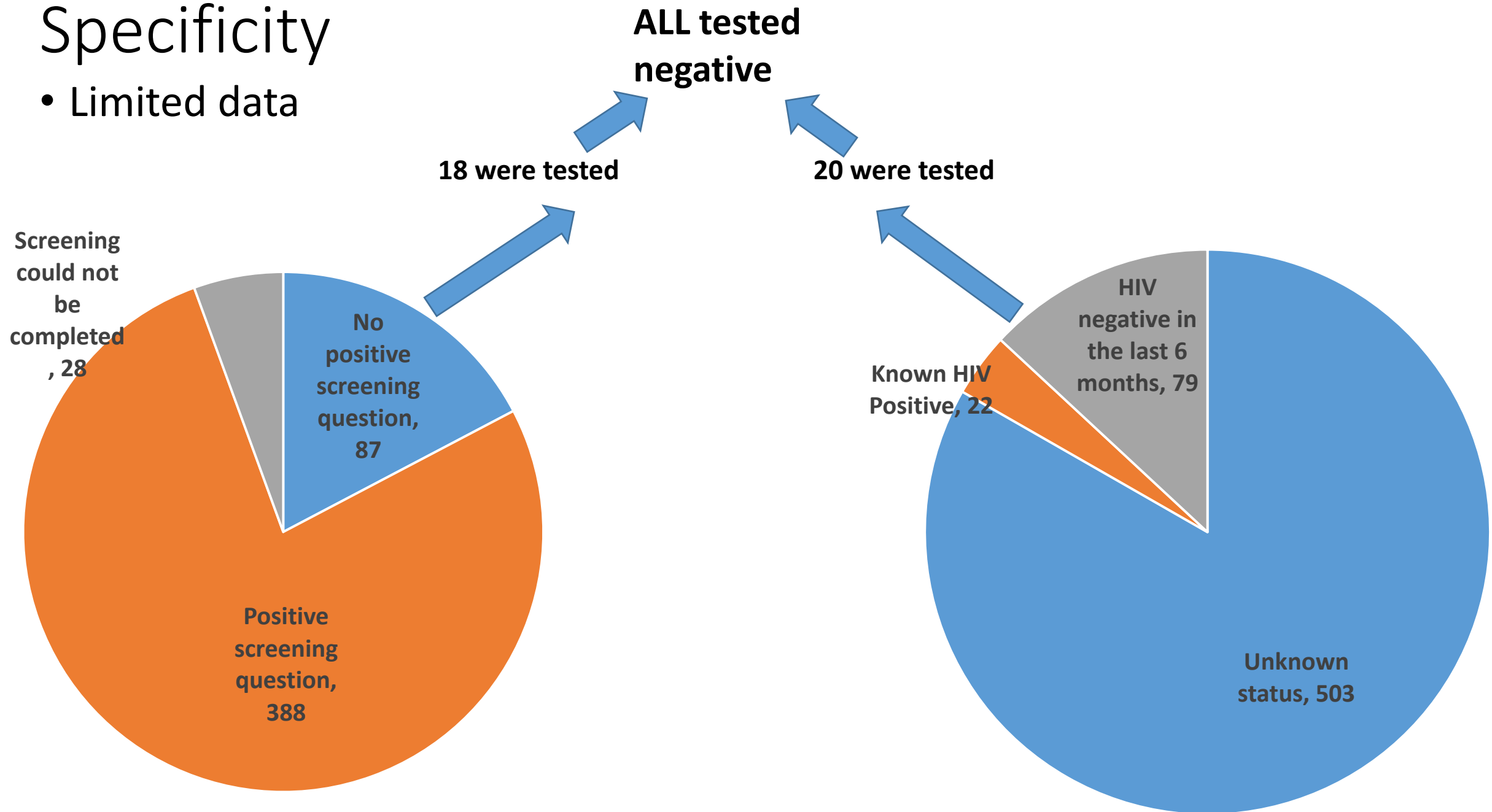
Testing per age group

Screening tool yield 5-14y = **5%**
Expected HIV prevalence 5-14y in SA = **2.7%**



Specificity

- Limited data



Conclusions

- The Screening Tool improves case finding in children with a yield of 5% (compared to childhood HIV prevalence of 2.7%)

Country of implementation	Number of questions	Number screened	Number needed to screen
South Africa	10	604	36
Malawi ¹	6	1815	67
Zimbabwe ²	4	3488	42

- It is effective in identifying HIV-infected children in the targeted age group (5-14y) – but can be used wider
- This screening tool needs further validation to ensure no children are missed – performed in a setting with universal testing

1. Schooley A, 2016

2. Ferrand RA et al, 2011, TMIH

Important points

1. Though there are existing guidelines, it is beneficial to bring them together a concise list of questions to assist the HCW and formalise the process in a documented framework.
2. Screening tools assist HCW to conserve time and resources by directing testing at the high risk children
3. Screening Tools must be evidence-based and preferably be validated in a setting with universal testing



Acknowledgements

- Our funders USAID and PEPFAR
- Dr Sanlie Untiedt - Tool design, data collection and collation
- PASP team – For implementing and monitoring the use of the tool
- Right to Care Paediatric Programme under Dr Leon Levin
- Dr Alan Schooley - Malawi
- Dr Rashida Ferrand - Zimbabwe

